

REMARKS

Applicants thank the Examiner for the courtesy of discussing this application with the undersigned on February 24, 2005. The preliminary amendment filed with the application was discussed and that it had not reached the Examiner at the time of examination of the application and issuance of the Official Action. This preliminary amendment addressed a number of the informalities noted by the Examiner in the Official Action, as discussed below. Also discussed was a proposed amendment to claims 1 and 9 along the lines presented below. The Examiner indicated that this appeared to distinguish these claims from the art relied upon to reject them, but that the Examiner would need to further consider this after this Amendment was submitted.

Specification

The Examiner objected to the title on the basis that it was not descriptive. Applicants' amended the title in the preliminary amendment to be "Power Drive Mechanism for a Motor Vehicle Liftgate Having a Disengageable Gear Train" and submit that this objection to the title has been rendered moot.

The Examiner also objected to the specification because of informalities in line 19 of page 6. Applicants corrected this informality in the preliminary amendment so that the objected to sentence read: "The circuitry then disengages the holding link 60 from the holding pin 72 and moves the actuator gear 24" Applicants submit that this objection has been rendered moot.

Claim Rejections – 35 U.S.C. § 112

The Examiner rejected claims 1 – 15 under 35 U.S.C. § 112, second paragraph due to certain informalities. Applicants had corrected certain of these informalities in the preliminary

amendment and have corrected the remainder in this Amendment. Applicants submit that the claims now satisfy the requirements of 35 U.S.C. § 112, second paragraph.

Double Patenting

The Examiner rejected claims 1, 2, 4 – 10, 12, 14 and 15 under the judicially created doctrine of obviousness type double patenting. Applicants submit that as amended, the independent claims, claims 1 and 9, are patentably distinct over the claims of U.S. 6,270,147, alone or in combination with Ciavaglia et al. and/or Mitchell. Each of claims 1 and 9, as amended, recite that the actuator, is operable upon energization to effect movement of the gear train to an engaged position effecting a driving engagement between a drive motor and a crank arm and that a holding linkage maintains the driving engagement of the gear train after it has been moved into the engaged position including after the actuator is deenergized. Applicants submit that none of the claims of U.S. 6,270,147, Ciavaglia et al., and Mitchell disclose a holding linkage that maintains a gear train in driving engagement after an actuator that moves the gear train into an engaged position where it is in driving engagement is deenergized.

Claim Rejections – 35 U.S.C. § 103

The Examiner rejected claims 1, 2, 4 – 10 and 12 – 15 under 35 U.S.C. § 103(a) as being unpatentable over Ciavaglia et al. in view of Mitchell. Claims 1 and 9 are the independent claims of this group. Applicants submit that as amended, claims 1 and 9 are allowable over Ciavaglia et al. in view of Mitchell.

Each of independent claims 1 and 9 as amended require a gear train movable by an actuator upon energization between an engaged position effecting driving engagement between a drive motor and a crank arm and a disengaged position. They also require a holding linkage that maintains the driving engagement of the gear train once said actuator moves the gear train into the engaged position including after the actuator is deenergized. Applicants submit that neither Ciavaglia et al. nor Mitchell disclose or suggest these limitations, particularly, the holding linkage that maintains the driving engagement of the gear train after the actuator has been deenergized.

The Examiner, in the Official Action, did not cite Ciavaglia et al. as disclosing such a movable gear train, conceding that it did not, or as disclosing a holding linkage. The Examiner cited Mitchell as disclosing a gear train movable between an engaged and a disengaged position and Mitchell's bearing bracket 11 and lever 23 as being a holding linkage. Applicants submit that Mitchell's bearing bracket 11 and lever 23 are not a holding linkage as now required by amended claims 1 and 9 that maintains a gear train in driving engagement after an actuator that moves the gear train into driving engagement is deenergized.

Mitchell is directed to an ironing machine that has an ironing roll 2 and an ironing shoe 3. The ironing roll 2 is moved to shoe 3 during operation. The ironing machine is powered by an electric motor 14 that drives a driving pinion 16 through gear reduction means 15, which is normally inoperative, to rotate the roll 2 and which also serves as a drive connection between an electrically operated prime mover, such as a solenoid magnet 17, and roll 2 for the purpose of bodily moving the roll 2 upon energization of the prime mover. However, Mitchell's solenoid must be energized and remain energized to maintain the driving engagement between his gear

train and roll 2. If the solenoid is disengaged, Mitchell's gear train is disengaged from roll 2. As explained in Mitchell:


When the solenoid is energized the armature 25 is moved upwardly and rocks the lever 23 so as to move the gear 21 into contact with the gear 22 and then move both of said gears, the shaft 5 and the roll 2 bodily, whereby the roll 2 will be disposed in substantial contact with or in pressing relation to the shoe 3, as shown in Fig. 2. When the solenoid is deenergized the roll 2, shaft 5 and gear 22 thereon gravitate to normal position thereof, aided by the spring 13, whereas the lever 23, supporting gear 21 and the armature 25 will likewise gravitate to a position rendering the drive means inoperative, as shown in Fig. 3. [Mitchell, p. 2, col. 1, lines 32 - 45]

In contrast, the holding linkage required by claims 1 and 9 maintains the movable gear train in driving engagement with the crank arm once the actuator has moved the gear train into the engaged position including after the actuator has been deenergized. In the embodiment described in the specification of the application, actuator 74 is only energized for a short period of time, illustratively 350 milliseconds. During that period, actuator 74 rotates an actuator link 46 in one direction to move the movable gear train into the engaged position. The holding link, holding link 60 in the illustrative embodiment described in the specification, then holds the movable gear train in the engaged position until the actuating link 46 is pivoted in the opposite direction. [Application, p. 7, lines 12 - 34] This contrasts with Mitchell where Mitchell's solenoid must be kept energized to maintain his gear train in driving engagement with roll 2.

In conclusion, Applicants submit that claims 1, 2, 4—10 and 12—15 are allowable and respectfully request the early notice of their allowance.

Respectfully submitted,

Dated: MARCH 1, 2005

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